



MIAMI-DADE COUNTY  
 PRODUCT CONTROL SECTION  
 11805 SW 26 Street, Room 208  
 Miami, Florida 33175-2474  
 T (786) 315-2590 F (786) 315-2599  
[www.miamidade.gov/economy](http://www.miamidade.gov/economy)

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)  
 BOARD AND CODE ADMINISTRATION DIVISION  
**NOTICE OF ACCEPTANCE (NOA)**

**CaptiveAire Systems, Inc.**  
 4641 Paragon Park Road  
 Raleigh, NC 27616

**SCOPE:** This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code. This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

**DESCRIPTION:** Series HREB Downblast Axial Steel Rooftop Fans

**APPROVAL DOCUMENT:** Drawing No. AXHREB, titled "Axial HREB", sheets 1 through 6 of 6, dated 10/07/2015, prepared by CaptiveAire Systems, Inc, signed and sealed by L. David Rice, P.E. on 07/27/2016, bearing the Miami-Dade County Product Control approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Section.

**MISSILE IMPACT RATING:** Large and Small Missile Impact Resistant

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, one of the five manufacturing locations: Youngsville, NC or Muskogee, OK or Redding, CA or West Union, IA or Bedford, PA or Groveland, FL, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**LIMITATION:** These fans cannot be installed within the ridge area, FBC 1523.6.5.2.13.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA consists of this page 1 and evidence page E-1, as well as approval document mentioned above. The submitted documentation was reviewed by **Carlos M. Utrera, P.E.**



*[Handwritten Signature]*  
 09/15/2016

NOA No. 16-0614.06  
 Expiration Date: September 22, 2021  
 Approval Date: September 22, 2016  
 Page 1

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**A. DRAWINGS**

1. Drawing No. **AXHREB**, titled "Axial HREB", sheets 1 through 6 of 6, dated 10/07/2015, prepared by CaptiveAire Systems, Inc, signed and sealed by L. David Rice, P.E. on 07/27/2016.

**B. TESTS**

1. Test reports on 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94  
2) Large Missile Impact Test per FBC, TAS 201-94  
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94  
along with marked-up drawings and installation diagram of Model HREB24 Rooftop Prop Fan, prepared by Intertek/ATI, Test Report No. **E8479.01-109-18**, dated 03/29/2016, with revision 1 dated 04/07/2016, signed and sealed by Joseph A. Reed, P.E.
2. Test reports on 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94  
2) Large Missile Impact Test per FBC, TAS 201-94  
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94  
along with marked-up drawings and installation diagram of Model HREB42 Rooftop Prop Fan, prepared by Intertek/ATI, Test Report No. **F1379.01-109-18**, dated 04/06/2016, with revision 1 dated 04/07/2016, signed and sealed by Joseph A. Reed, P.E.

**C. CALCULATIONS**

1. Anchor verification calculations prepared by Rice Engineering, dated 07/27/2016, signed and sealed by L. David Rice, P.E.

**D. QUALITY ASSURANCE**

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

**E. MATERIAL CERTIFICATIONS**

1. None.

**F. STATEMENTS**

1. Statement letter of code conformance to the 5<sup>th</sup> edition (2014) FBC issued by Rice Engineering, dated 07/27/2016, signed and sealed by L. David Rice, P.E.
2. Statement letters of no financial interest issued by Rice Engineering, dated 07/27/2016, signed and sealed by L. David Rice, P.E.



09/15/2016

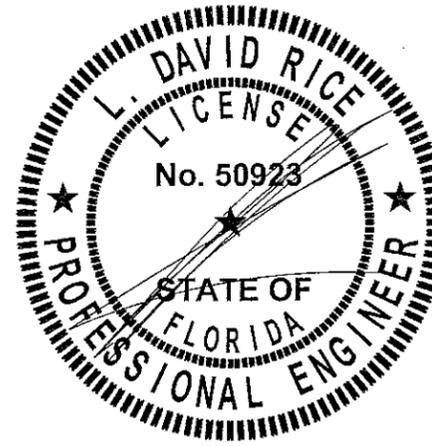
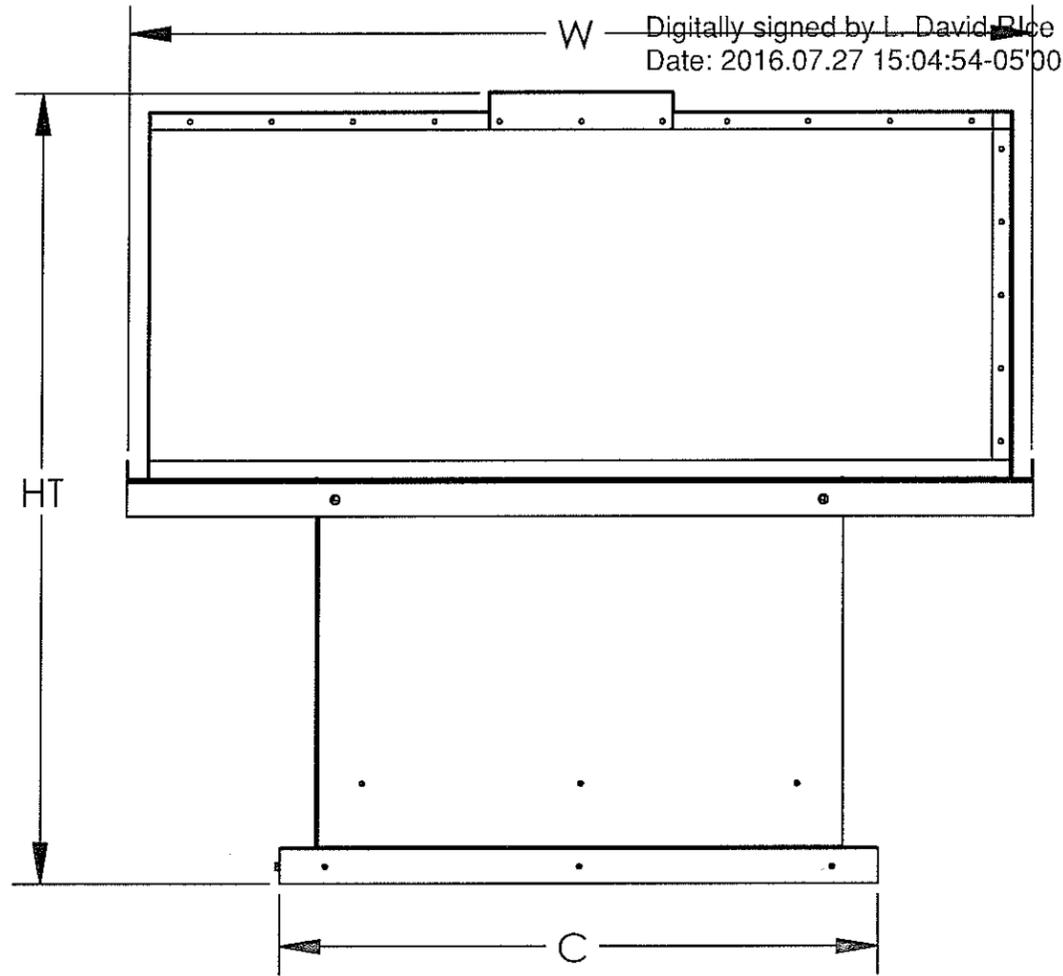
Carlos M. Utrera, P.E.  
Product Control Examiner  
NOA No. 16-0614.06

Expiration Date: September 22, 2021  
Approval Date: September 22, 2016

# Dimensional Data - Axial HREB

07-27-2016

Revision History				
#	Description	Revised by	ECN#	Date
0	Open Axial HREB NOA	J Hess	2740	10/7/15
1				



Florida Firm No.: F-01000005061  
Certificate of Authorization: 9090

FAN MODEL	HT (in)	W (in)	C (in)	WEIGHT (lbs)
HREB24	47	58	35	425
HREB30	47	66	41	550
HREB36	47	78	47	700
HREB42	54	87	53	800

**DESIGN PRESSURE: +80.0 / -80.0 PSF  
LARGE MISSILE IMPACT RESISTANT**

**General Notes:**

1. This approval is for the structural capacity and impact rating of the exterior housing only; it does not include any interior mechanism or electrical part.
2. These fans have not been wind tested for Wind Driven Rain Test per Florida Building code, TAS100 (A)-95.

**Notes:**

1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
2. Tested for areas including high velocity hurricane zones.
3. Tested under Miami-Dade County Notification number ATI **15036 and 15066.**

Approved as complying with the  
Florida Building Code  
Date 09/22/2016  
NOA# 16-0014.06  
Miami Dade Product Control  
By [Signature]

**CaptiveAire, Inc. commercial kitchen ventilation**  
4641 Paragon Park Road, Raleigh, NC 27616  
P 800.334.925 | F 919.227.5994

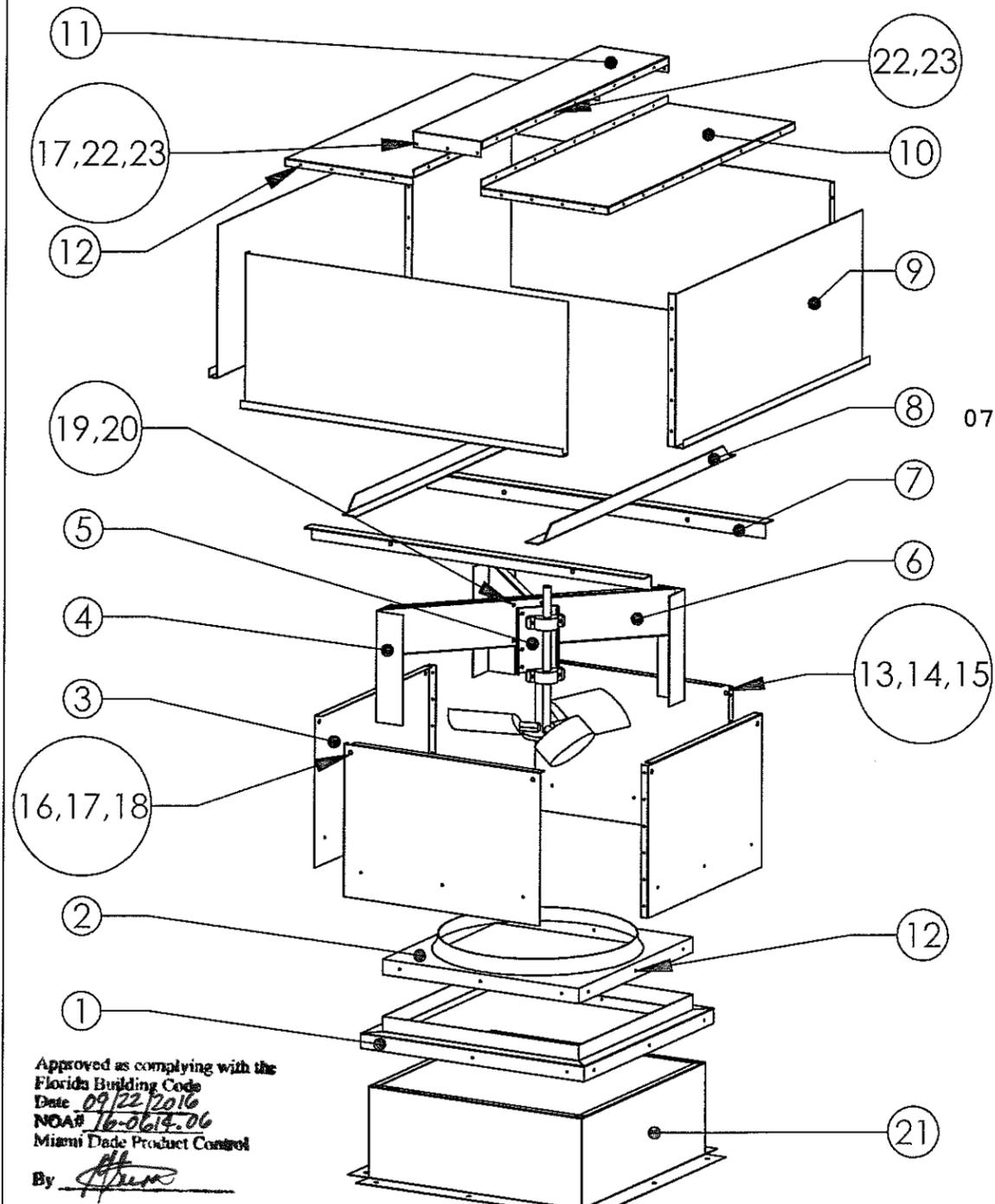
Material: N/A	Part Number: N/A
Blank Size: N/A	MACOLA Number: N/A
Weight: N/A	Drawing Name: AXIAL HREB
	Drawn By: J Hess
	Drawing Number: AXHREB01
	Sheet: 1 of 6

Unless Otherwise Specified  
Dimensions are in Inches.  
Standard Tolerances are:  
Fractions:  $\pm 1/16$   
Decimal:  $.XX \pm 0.05$   
 $.XXX \pm 0.015$   
Angles:  $\pm 1^\circ$



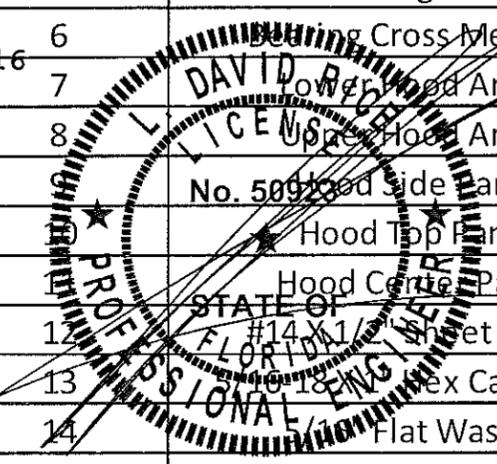
# Dimensional Data - Axial HREB

Revision History				
#	Description	Revised by	ECN#	Date
0	Open Axial HREB NOA	J Hess	2740	10/7/15
1				



Approved as complying with the Florida Building Code  
 Date 09/22/2016  
 NOA# 16-0614-06  
 Miami Dade Product Control  
 By *[Signature]*

Item Number	Description Of Part	Material
1	Curb Cap	16 Gauge Galv. Steel
2	Panel Assembly	16 Gauge Galv. Steel
3	Access Panel	18 Gauge Galv. Steel
4	Panel Support	12 Gauge Galv. Steel
5	Bearing Plate	12 Gauge Galv. Steel
6	Supporting Cross Member	12 Gauge Galv. Steel
7	Lower Hood Angle	10 Gauge Galv. Steel
8	Upper Hood Angle	10 Gauge Galv. Steel
9	Right Side Panel	18 Gauge Galv. Steel
10	Hood Top Panel	18 Gauge Galv. Steel
11	Hood Center Panel	12 Gauge Galv. Steel
12	#14 X 1/4" Sheet Screw	Zinc-plated Steel
13	#10 X 1/2" Hex Cap Screw	Zinc-plated Steel
14	1/4" Flat Washer	Zinc-plated Steel
15	5/16" Flange Nut	Zinc-plated Steel
16	#10 X 1/2" Hex Screw	Zinc-plated Steel
17	1/4" Flat Washer	Zinc-plated Steel
18	1/4"-20 Rivsert	Zinc-plated Steel
19	3/8-16 X 1" Hex Cap Screw	Zinc-plated Steel
20	3/8" Hex Nut	Stainless Steel
21a	Curb (Up to 20" Height)	20 Gauge Aluminized Steel
21b	Curb (20+" to 42" Height)	16 Gauge Aluminized Steel
22	1/4"-20 X 1" Bolt	Zinc-plated Steel
23	1/4"-20 Nut	Zinc-plated Steel



- Notes:
1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
  2. Tested for areas including high velocity hurricane zones.
  3. Tested under Miami-Dade County Notification number ATI 15036 and 15066.

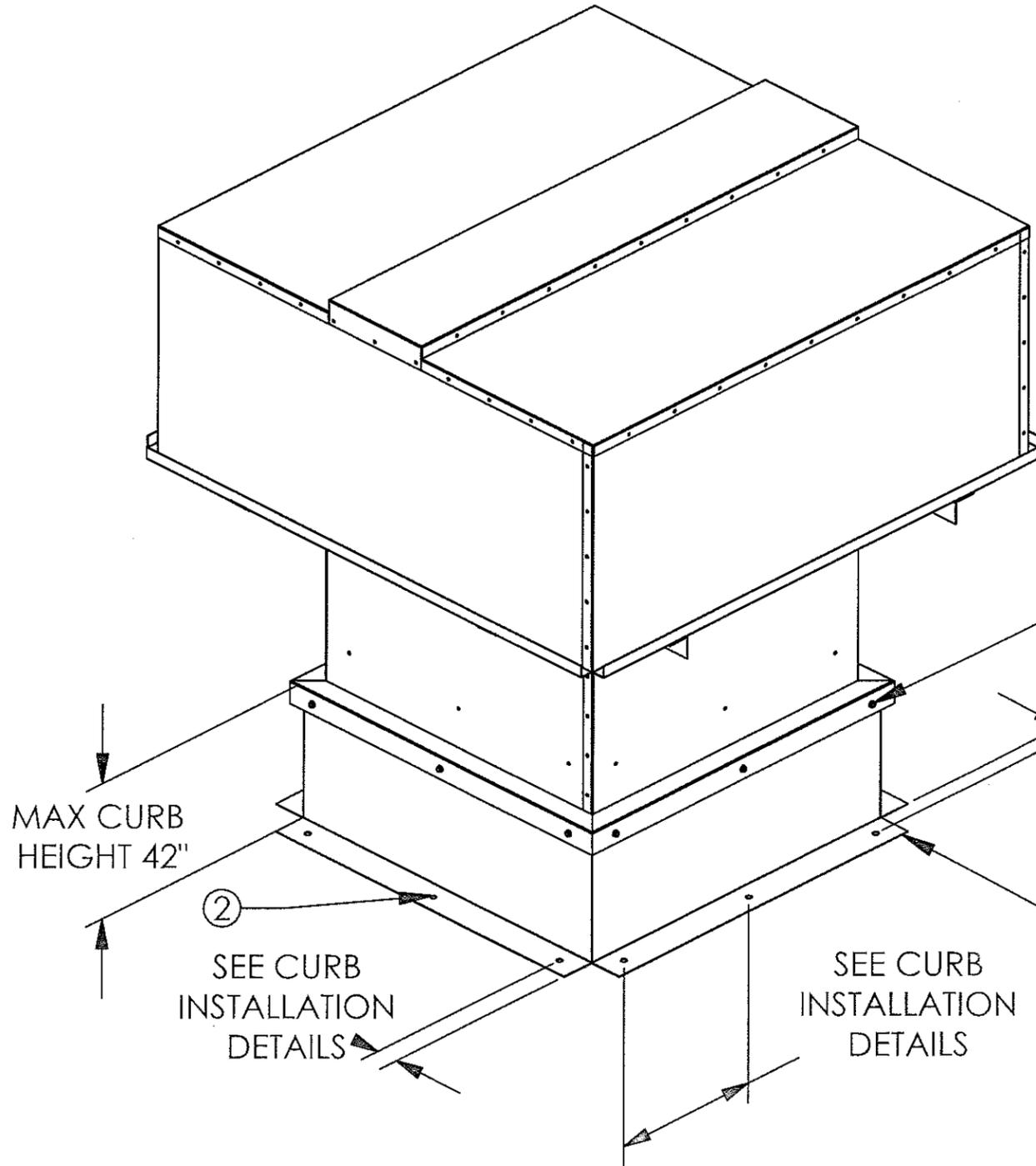
CaptiveAire, Inc. commercial kitchen ventilation  
 4641 Paragon Park Road, Raleigh, NC 27616  
 P 800.334.925 | F 919.227.5994

Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches.  Standard Tolerances are: Fractions: ±1/16 Decimal: .XX±.05 .XXX±.015 Angles: ±1°
Blank Size: N/A	MACOLA Number: N/A	
Weight: N/A	Drawing Name: AXIAL HREB	
	Drawn By: J Hess	
	Drawing Number: AXHREB 02	
	Sheet: 2 of 6	



# Dimensional Data - Axial HREB

Revision History				
#	Description	Revised by	ECN#	Date
0	Open Axial HREB NOA	J Hess	2740	10/7/15
1				



1. SECURE FAN BASE TO CURB USING 1/4"-14 X 2" ZINC PLATED STEEL SELF DRILLING SCREWS (ELCO DRIL-FLEX OR BETTER) THROUGH PRE-PUNCHED HOLES IN THE FAN BASE. (SEE TABLE A ON PAGES 3-6 FOR QTY).

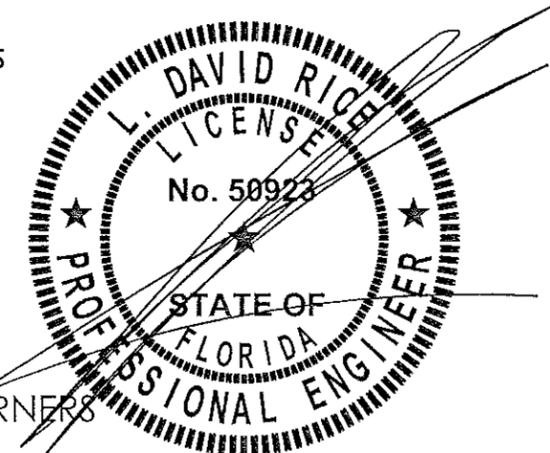
2. SECURE CURB TO ROOF OR WALL BY DRILLING 1/4" DIA PILOT HOLES IN THE CURB FLANGE AT LOCATIONS SHOWN IN THE DIAGRAM. SEE PAGES 3-6 FOR FASTENER TYPE. USE TABLE B FOR FASTENER QTY.

07-27-2016

SEE CURB INSTALLATION DETAILS

FULLY WELDED CURB CORNERS (ABOVE 20" HEIGHT)

SEE CURB INSTALLATION DETAILS



Florida Firm No.: F-01000005061  
Certificate of Authorization: 9090

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NOA# 16-0614-06  
Miami Dade Product Control

By *[Signature]*

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Notes:

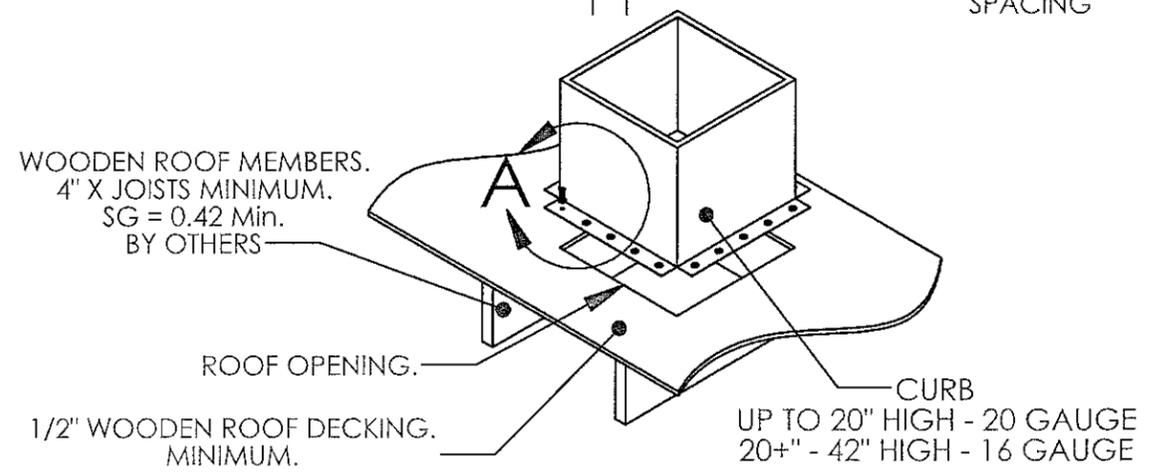
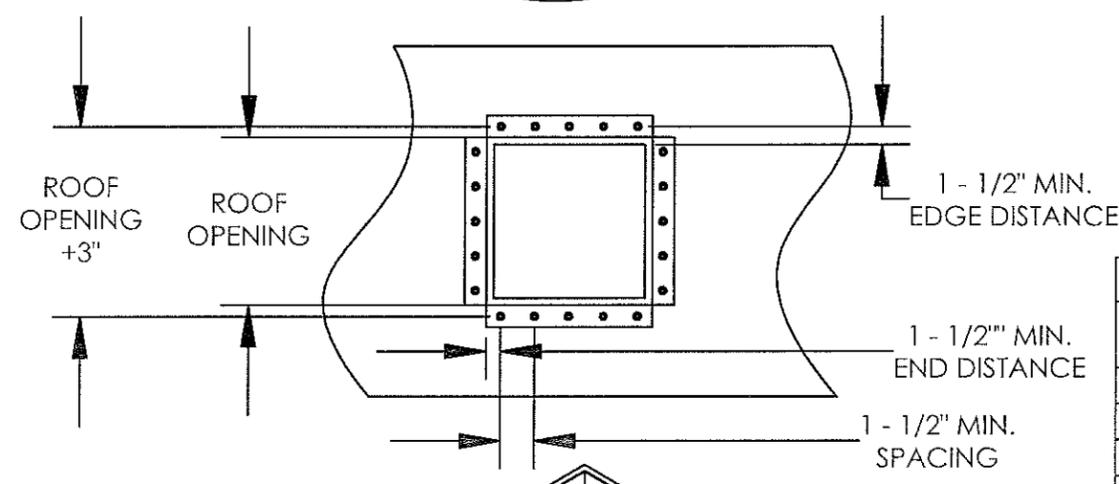
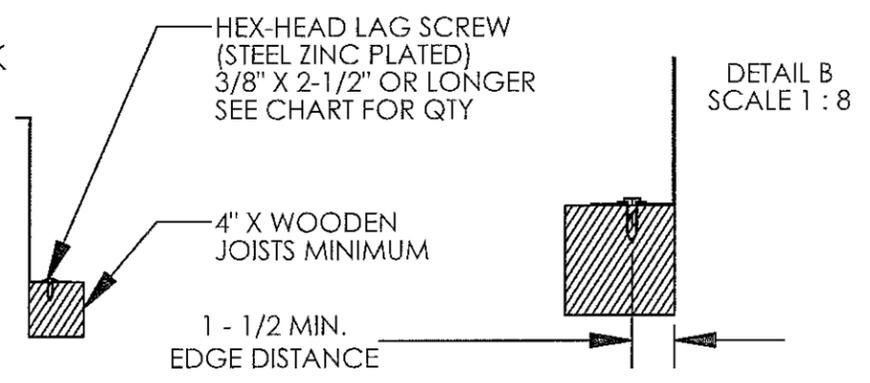
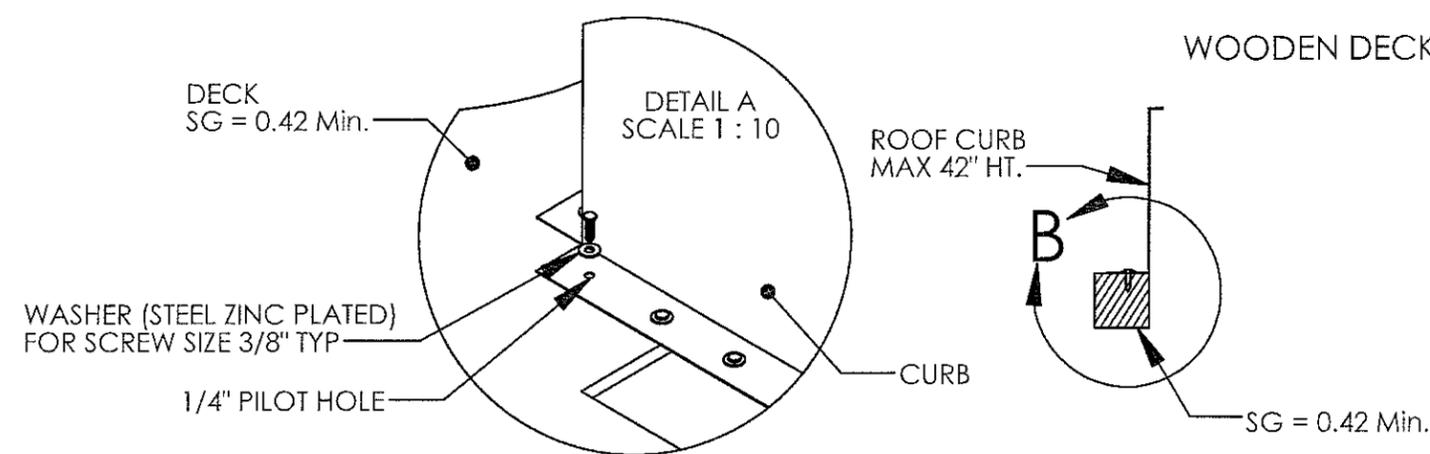
1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
2. Tested for areas including high velocity hurricane zones.
3. Tested under Miami-Dade County Notification number ATI 15036 and 15066.

Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches.  Standard Tolerances are: Fractions: ±1/16 Decimal: .XX±05 .XXX±.015 Angles: ±1°
Blank Size: N/A	MACOLA Number: N/A	
Weight: N/A	Drawing Name: AXIAL HREB	
	Drawn By: J Hess	
	Drawing Number: AXHREB 03	
	Sheet: 3 of 6	



# Miami-Dade County - Roof Curb Installation Guide For Wood Substrate

CaptiveAire, Inc. commercial kitchen ventilation  
4641 Paragon Park Road, Raleigh, NC 27616  
P 800.334.925 | F 919.227.5994



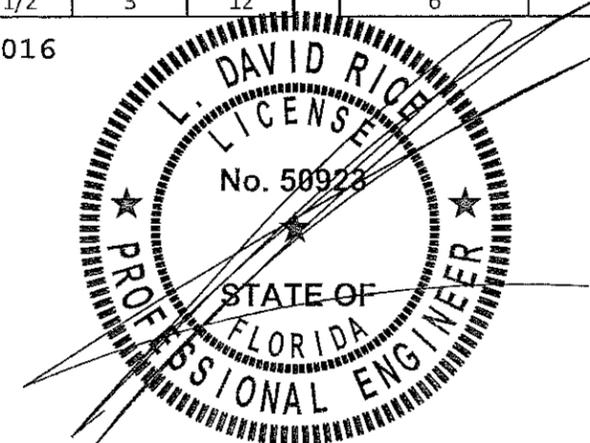
**TABLE A: FAN TO CURB**

Unit Size	Base Size	Curb Size	Fasteners	
			Per Side	Total
HREB24	35"	33 - 1/2"	3	12
HREB30	41"	39 - 1/2"	3	12
HREB36	47"	45 - 1/2"	3	12
HREB42	53"	51 - 1/2"	3	12

**TABLE B: CURB TO DECK**

WOOD	
Per Side	Total
5	20
5	20
6	24
6	24

07-27-2016



Approved as complying with the Florida Building Code  
Date: 09/22/2016  
NOA#: 16-0614-06  
Miami Dade Product Control  
By: *[Signature]*

Florida Firm No.: F-01000005061  
Certificate of Authorization: 9090

- Notes:
1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
  2. Tested for areas including high velocity hurricane zones.
  3. Tested under Miami-Dade County Notification number ATI 15036 and 15066.

Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches.
Blank Size: N/A	MACOLA Number: N/A	
Weight: N/A	Drawing Name: AXIAL HREB	
	Drawn By: J Hess	
	Drawing Number: AXHREB 04	
	Sheet: 4 of 6	Standard Tolerances are: Fractions: ±1/16 Decimal: .XX±.05 .XXX±.015 Angles: ±1°



# Miami-Dade County - Roof Curb Installation Guide For Concrete Substrate

CaptiveAire, Inc. commercial kitchen ventilation  
4641 Paragon Park Road, Raleigh, NC 27616  
P 800.334.925 | F 919.227.5994

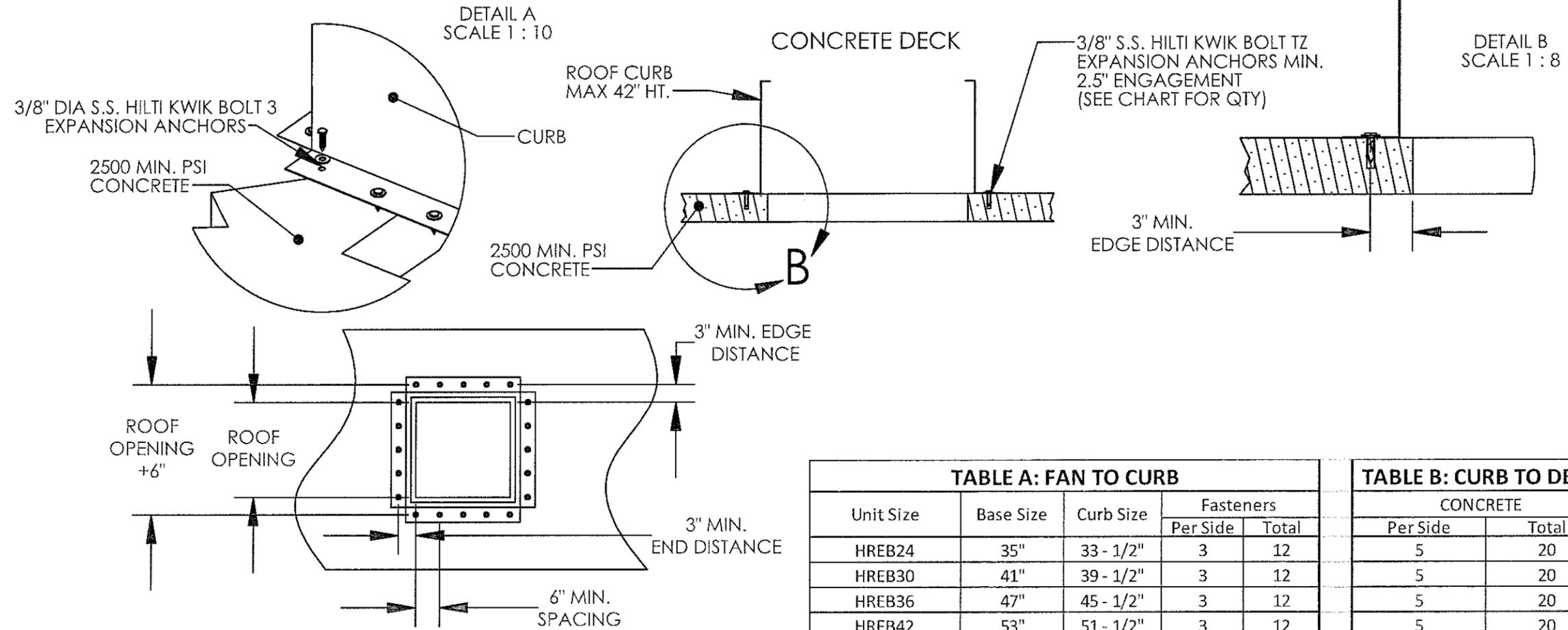
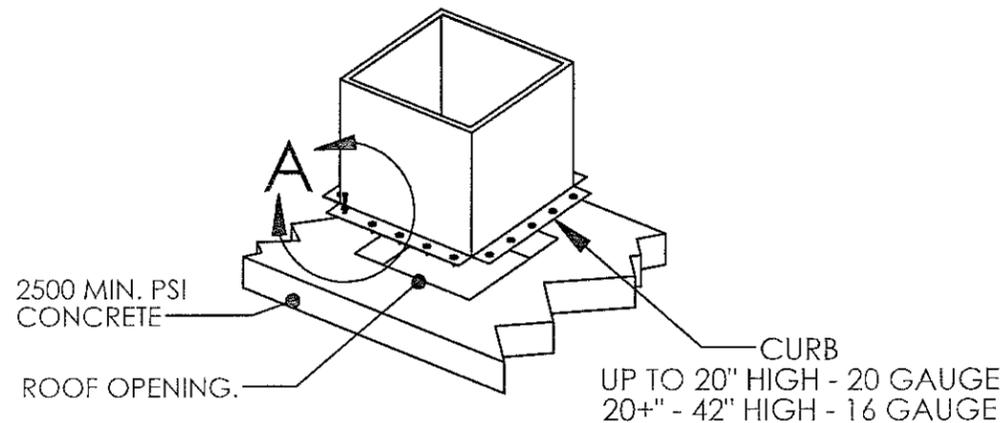
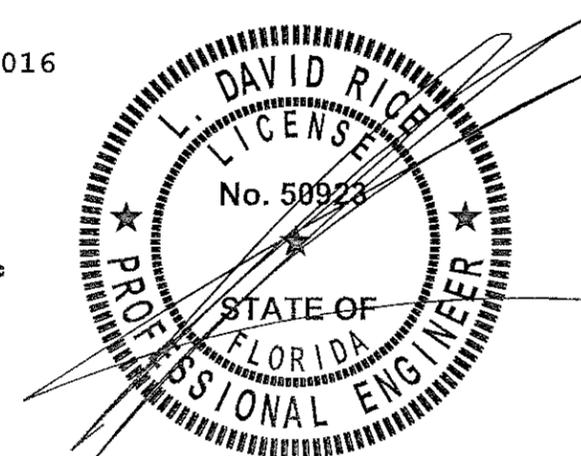


TABLE A: FAN TO CURB					TABLE B: CURB TO DECK	
Unit Size	Base Size	Curb Size	Fasteners		CONCRETE	
			Per Side	Total	Per Side	Total
HREB24	35"	33 - 1/2"	3	12	5	20
HREB30	41"	39 - 1/2"	3	12	5	20
HREB36	47"	45 - 1/2"	3	12	5	20
HREB42	53"	51 - 1/2"	3	12	5	20

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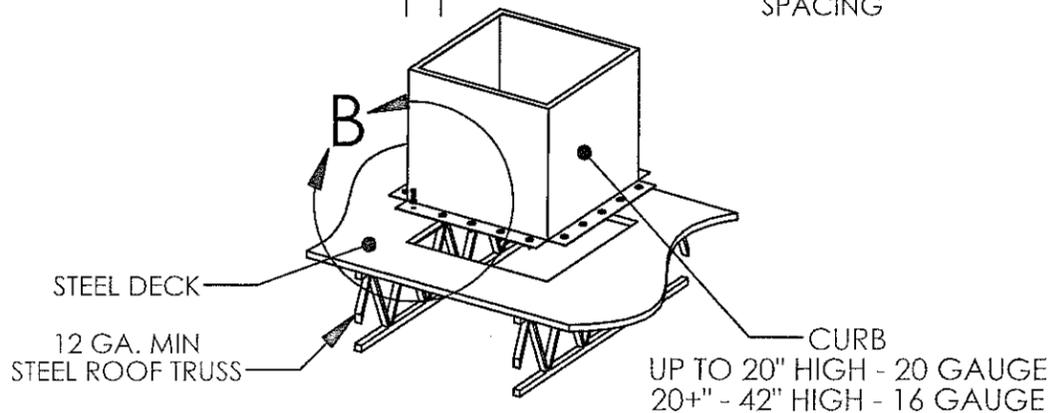
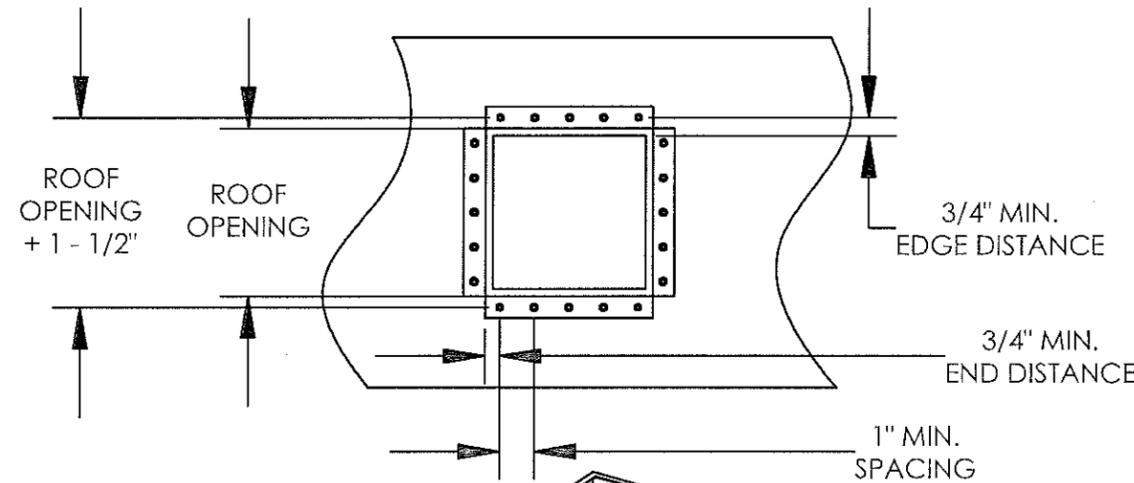
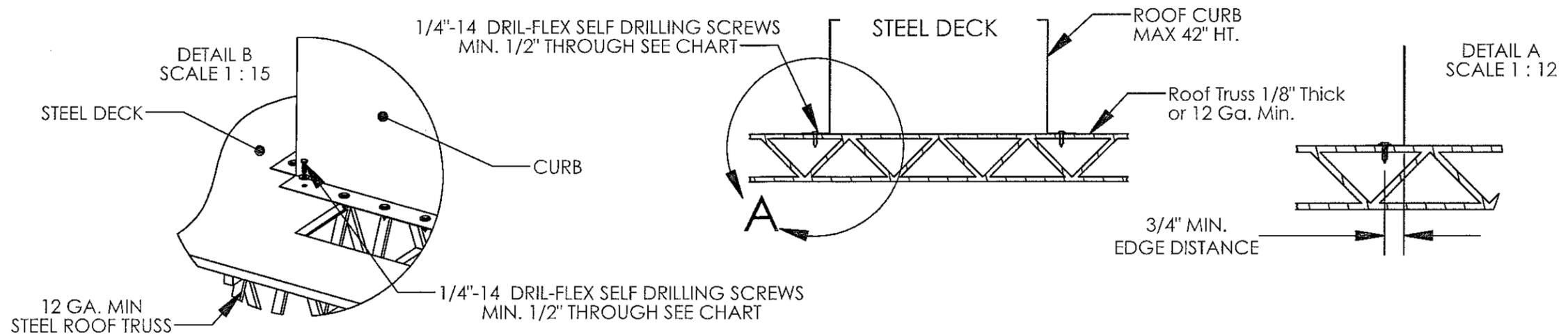
- Notes:
1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
  2. Tested for areas including high velocity hurricane zones.
  3. Tested under Miami-Dade County Notification number ATI 15036 and 15066.

Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches.  Standard Tolerances are: Fractions: ±1/16 Decimal: .XX±.05 .XXX±.015 Angles: ±1°
Blank Size: N/A	MACOLA Number: N/A	
Weight: N/A	Drawing Name: AXIAL HREB	
	Drawn By: J Hess	
	Drawing Number: AXHREB 05	
	Sheet: 5 of 6	



# Miami-Dade County - Roof Curb Installation Guide For Steel Substrate

CaptiveAire, Inc. commercial kitchen ventilation  
4641 Paragon Park Road, Raleigh, NC 27616  
P 800.334.925 | F 919.227.5994

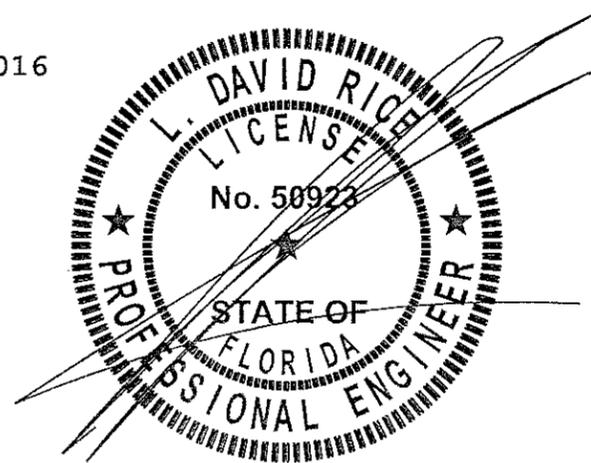


Unit Size	Base Size	Curb Size	Fasteners	
			Per Side	Total
HREB24	35"	33 - 1/2"	3	12
HREB30	41"	39 - 1/2"	3	12
HREB36	47"	45 - 1/2"	3	12
HREB42	53"	51 - 1/2"	3	12

STEEL	
Per Side	Total
5	20
5	20
5	20
5	20

07-27-2016

Approved as complying with the  
Florida Building Code  
Date 09/22/2016  
NOA# 16-0614.06  
Miami Dade Product Control  
By *[Signature]*



Florida Firm No.: F-01000005061  
Certificate of Authorization: 9090

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Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches.
Blank Size: N/A	MACOLA Number: N/A	
Weight: N/A	Drawing Name: AXIAL HREB	
	Drawn By: J Hess	
	Drawing Number: AXHREB 06	
	Sheet: 6 of 6	
		Standard Tolerances are: Fractions: ±1/16 Decimal: .XX±.05 .XXX±.015 Angles: ±1°